



TITLE: TRANSGENIC CIRCULATING ENDOTHELIAL CELLS
INVENTORS NAME: Robert P. Hebbel et al.
SERIAL NO.: 09/865,022

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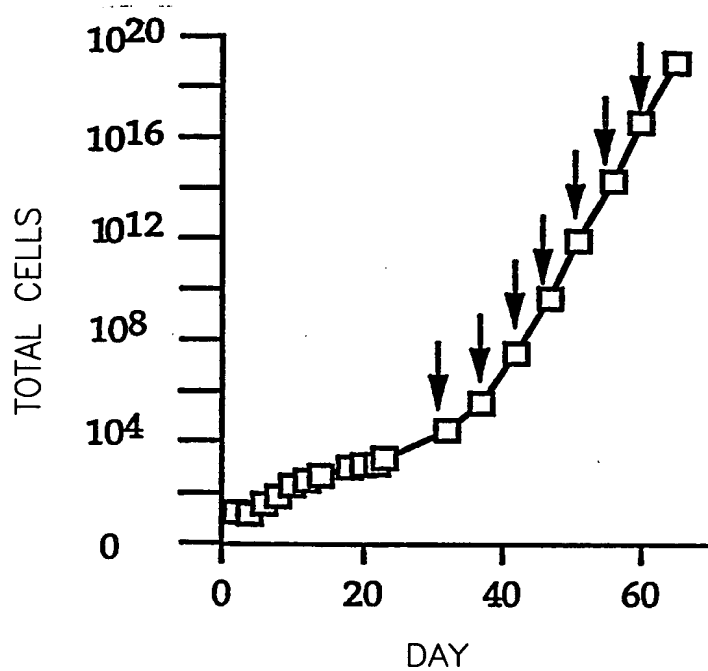


FIG. 1



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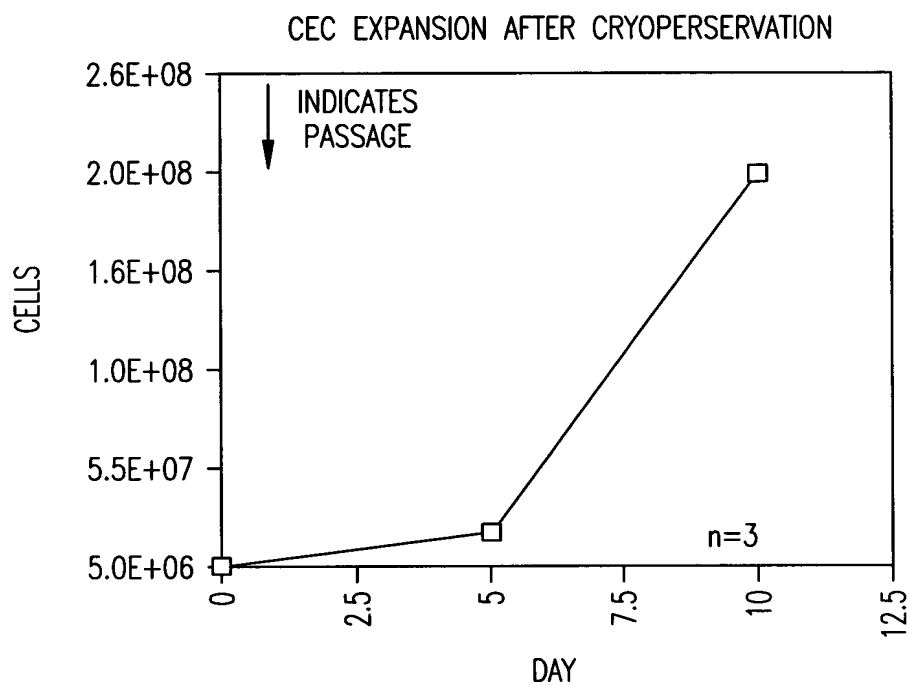


FIG. 2



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HB-III/SQ/egfp, HF8SQgfp.gp, original HB- with B-domain SQ insert based on Lind et al, Eur J Biochem, 232, p21 primer sequence, containing eGFP protein sequence

ATGCAAATAGAGCTCTCCACCTGCTTCTTTCTGTGCCTTTTGCAT
TCTGCTTT
AGTGCCACCAGAAGATACTACCTGGGTGCAGTGGAACTGTCATGG
GACTATATGCAAAGTGA
TCTCGGTGAGCTGCCTGTGGACGCAAGATTTCCTCCTAGAGTGCC
AAAATCTTTTCCATTCAA
CACCTCAGTCGTGTACAAAAAGACTCTGTTTGTAGAATTCACGGTT
CACCTTTTCAACATCGC
TAAGCCAAGGCCACCCTGGATGGGTCTGCTAGGTCCTACCATCCA
GGCTGAGGTTTATGATAC
AGTGGTCATTACACTTAAGAACATGGCTTCCCATCCTGTCAGTCTT
CATGCTGTTGGTGTATCC
TACTGGAAAGCTTCTGAGGGAGCTGAATATGATGATCAGACCAGT
CAAAGGGAGAAAGAAGA
TGATAAAGTCTTCCCTGGTGGAAGCCATACATATGTCTGGCAGGTC
CTGAAAGAGAATGGTCC
AATGGCCTCTGACCCACTGTGCCTTACCTACTCATATCTTTCTCAT
GTGGACCTGGTAAAAGA
CTTGAATTCAGGCCTCATTGGAGCCCTACTAGTATGTAGAGAAGG
GAGTCTGGCCAAGGAAA
AGACACAGACCTTGACAAATTTATACTACTTTTTGCTGTATTTGA
TGAAGGGAAAAGTTGGC
ACTCAGAAACAAGAACTCCTTGATGCAGGATAGGGATGCTGCAT
CTGCTCGGGCCTGGCCT
AAAATGCACACAGTCAATGGTTATGTAAACAGGTCTCTGCCAGGT
CTGATTGGATGCCACAG
GAAATCAGTCTATTGGCATGTGATTGGAATGGGCACCACTCCTGA
AGTGCACCTCAATATTCCT
CGAAGGTCACACATTTCTTGTGAGGAACCATCGCCAGGCGTCCTT
GGAAATCTCGCCAATAAC
TTTCCTTACTGCTCAAACACTCTTGATGGACCTTGGACAGTTTCTA
CTGTTTTGTTCATATCTCT
TCCCACCAACATGATGGCATGGAAGCTTATGTCAAAGTAGACAGC
TGTCCAGAGGAACCCCA
ACTACGAATGAAAAATAATGAAGAAGCGGAAGACTATGATGATGA
TCTTACTGATTCTGAAA
TGGATGTGGTCAGGTTTGATGATGACAACTCTCCTTCCTTTATCCA
AATTCGCTCAGTTGCCA
AGAAGCATCTFAAACTTGGGTACATTACATTGCTGCTGAAGAGG
AGGACTGGGACTATGCT
CCCTTAGTCCTCGCCCCGATGACAGAAGTTATAAAAGTCAATATT
TGAACAATGGCCCTCAG
CGGATTGGTAGGAAGTACAAAAAGTCCGATTTATGGCATAACA
GATGAAACCTTTAAGAC
TCGTGAAGCTATTTCAGCATGAATCAGGAATCTTGGGACCTTTACTT
TATGGGGAAGTTGGAGA
CACACTGTTGATTATATTTAAGAATCAAGCAAGCAGACCATATAA
CATCTACCCCTCACGGAAT
CACTGATGTCCGTCTTTGTATTCAAGGAGATTACCAAAGGTGTA
AAACATTGAAGGATTT
TCCAATCTGCCAGGAGAAATATTCAATATAAATGGACAGTGAC

FIG. 3A

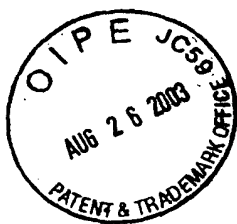


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TGTAGAAGATGGGCCAA
CTAAATCAGATCCTCGGTGCCTGACCCGCTATTACTCTAGTTTCGT
TAATATGGAGAGAGATC
TAGCTTCAGGACTCATTGGCCCTCTCCTCATCTGCTACAAAGAATC
TGTAGATCAAAGAGGAA
ACCAGATAATGTCAGACAAGAGGAATGTCATCCTGTTTTCTGTATT
TGATGAGAACCGAAGCT
GGTACCTCACAGAGAATATACAACGCTTTCTCCCAATCCAGCTG
GAGTGCAGCTTGAGGATC
CAGAGTTCCAAGCCTCCAACATCATGCACAGCATCAATGGCTATG
TTTTTGATAGTTTGAGT
TGTCAGTTTGTGTGTCATGAGGTGGCATACTGGTACATTCTAAGCAT
TGGAGCACAGACTGACT
TCCTTTCTGTCTTCTTCTCTGGATATACCTTCAAACACAAAATGGTC
TATGAAGACACACTCAC
CCTATTCCCATTTCTCAGGAGAACTGTCTTCATGTCGATGGAAAAC
CCAGGTCTATGGATTCT
GGGGTGCCACAACCTCAGACTTTCCGGAACAGAGGCATGACCGCCTT
ACTGAAGGTTTCTAGTTG
TGACAAGAACACTGGTGATTATTACGAGGACAGTTATGAAGATAT
TTCAGCATACTTGCTGAG
TAAAAACAATGCCATTGAACCTAGG
AGCTTCTCTCAGAATATGGTGAGCAAGGGCGAGGAGC
TGTTACCCGG GGTGGTGCCC
ATCCTGGTCG AGCTGGACGG CGACGTAAAC GGCCACAAGT
TCAGCGTGTG CGGCGAGGGC
GAGGGCGATG CCACCTACGG CAAGCTGACC CTGAAGTTCA
TCTGCACCAC CGGCAAGCTG
CCCGTGCCCT GGCCCACCCT CGTGACCACC CTGACCTACG
GCGTGCACTG CTTGAGCCGC
TACCCCGACC ACATGAAGCA GCACGACTTC TTCAAGTCCG
CCATGCCCGA AGGCTACGTC
CAGGAGCGCA CCATCTTCTT CAAGGACGAC GGCAACTACA
AGACCCGCGC CGAGGTGAAG
TTCGAGGGCG ACACCCTGGT GAACCGCATC GAGCTGAAGG
GCATCGACTT CAAGGAGGAC
GGCAACATCC TGGGGCACAA GCTGGAGTAC AACTACAACA
GCCACAACGT CTATATCATG
GCCGACAAGC AGAAGAACGG CATCAAGGTG AACTTCAAGA
TCCGCCACAA CATCGAGGAC
GGCAGCGTGC AGCTCGCCGA CCACTACCAG CAGAACAACC
CCATCGGCGA CGGCCCCGTG
CTGCTGCCCC ACAACCACTA CCTGAGCACC CAGTCCGCCC
TGAGCAAAGA CCCCACGAG
AAGCGCGATC ACATGGTCCT GCTGGAGTTC GTGACCGCCG
CCGGGATCAC TCTCGGCATG
GACGAGCTGT ACAAGTATCCACAGTCTTGAAACGCCATCAACGG
GAAATAACTCGTACTACTCT
TCAGTCAGATCAAGAGG
AAATTGACTATGATGATACCATATCAGTTGAAATGAAGAAGGAAG
ATTTTGACATTTATGATG
AGGATGAAATCAGAGCCCCCGCAGCTTTCAAAGAAAACACGAC
ACTATTTTATTGCTGCA
GTGGAGAGGCTCTGGGATTATGGGATGAGTAGCTCCCCACATGTT

FIG. 3B



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CTAAGAAACAGGGCTCA
GAGTGGCAGTGTCCCTCAGTTCAAGAAAGTTGTTTTCCAGGAATTT
ACTGATGGCTCCTTTAC
TCAGCCCTTATACCGTGGAGAACTAAATGAACATTTGGGACTCCT
GGGGCCATATATAAGAG
CAGAAGTTGAAGATAATATCATGGTAACTTTTCAGAAATCAGGCCT
CTCGTCCCTATTCTTTCT
ATTCTAGCCTTATTTCTTATGAGGAAGATCAGAGGCAAGGAGCAG
AACCTAGAAAAAACTTT
GTCAAGCCTAATGAAACCAAACTTACTTTTGGAAGTGCAACAT
CATATGGCACCCTAA
AGATGAGTTTGACTGCAAGCCTGGGCTTATTTCTCTGATGTTGAC
CTGGAAAAAGATGTGCA
CTCAGGCCTGATTGGACCCCTTCTGGTCTGCCACACTAACACACTG
AACCTGCTCATGGAG
ACAAGTGACAGTACAGGAATTTGCTCTGTTTTTCACCATCTTTGAT
GAGACCAAAGCTGGTA
CTTCACTGAAAATATGGAAGAACTGCAGGGCTCCCTGCAATAT
CCAGATGGAAGATCCCA
CTTTTAAAGAGAATTATCGCTTCCATGCAATCAATGGCTACATAAT
GGATACACTACCTGGCT
TAGTAATGGCTCAGGATCAAAGGATTCGATGGTATCTGCTCAGCA
TGGGCAGCAATGAAAAC
ATCCATTCTATTCAATTCAGTGGACATGTGTTCACTGTACGAAAAA
AAGAGGAGTATAAAATG
GCACTGTACAATCTCTATCCAGGTGTTTTTGAGACAGTGGAAATGT
TACCATCCAAAGCTGGA
ATTGGCGGGTGAATGCCTTATTGGCGAGCATCTACATGCTGGG
ATGAGCACACTTTTTCTG
GTGTACAGCAATAAGTGTGAGACTCCCCTGGGAATGGCTTCTGGA
CACATTAGAGATTTTTCAG
ATTACAGCTTCAGGACAATATGGACAGTGGGCCCCAAAGCTGGCC
AGACTTCATTATTCCGG
ATCAATCAATGCCTGGAGCACCAAGGAGCCCTTTTCTTGATCAA
GGTGGATCTGTTGGCACC
AATGATTATTCAGGCATCAAGACCCAGGGTGCCCGTCAGAAATT
CTCCAGCCTCTACATCTC
TCAGTTTATCATCATGTATAGTCTTGATGGGAAGAAGTGGCAGACT
TATCGAGGAAATTCAC
TGGAACCTTAATGGTCTTCTTTGGCAATGTGGATTATCTGGGATA
AAACACAATATTTTTAA
CCCTCCAATTATTGCTCGATACATCCGTTTGCACCCAACCTCATTAT
AGCATTGCGAGCACTCTT
CGCATGGAGTTGATGGGCTGTGATTTAAATAGTTGCAGCATGCCA
TTGGGAATGGAGAGTAA
AGCAATATCAGATGCACAGATTACTGCTTCATCCTACTTTACCAAT
ATGTTTGCCACCTGGTC
TCCTTCAAAGCTCGACTTCACCTCCAAGGGAGGAGTAATGCCTG
GAGACCTCAGGTGAATA
ATCCAAAAGAGTGGCTGCAAGTGGACTTCCAGAAGACAATGAAAG
TCACAGGAGTAACTACT
CAGGGAGTAAATCTCTGCTTACCAGCATGTATGTGAAGGAGTTC
CTCATCTCCAGCAGTCAA
GATGGCCATCAGTGGACTCTCTTTTTTCAGAATGGCAAAGTAAAG

FIG. 3C



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GTTTTTCAGGGAAATCAA
GACTCCTTCACACCTGTGGTGAACCTCTCTAGACCCACCGTTACTGA
CTCGCTACCTTCGAATT
CACCCCCAGAGTTGGGTGCACCAGATTGCCCTGAGGATGGAGGTT
CTGGGCTGCGAGGCACA
GGACCTCTACTGA*

FIG. 3D



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GGTGTAACACATTGGAAGGATTTTCCAATTCTGCCAGGAGAAATATTCAAATATAAATGGACAG
TGACTGTAGAAGATGGGCCAACTAAATCAGATCCTCGGTGCCCTGACCCGCTATTACTCTAGTTT
CGTTAATATGGAGAGAGATCTAGCTTCAGGACTCATGGCCCTCTCCTCATCTGCTACAAAGAA
TCTGTAGATCAAAGAGGAAACAGATAATGTGACACAAGAGGAATGTCATCCTGTTTCTGTAT
TTGATGAGAACCAGGCTGGTACCTCACAGAGAATATACAACGCTTTCTCCCAATCCAGCTGG
AGTGCAGCTTGAGGATCCAGAGTTCCAAGCCTCCAACATCATGCACAGCATCAATGGCTATGTT
TTTGATAGTTTGCAGTTGTGAGTTTGTGTCATGAGGTGGCATACTGGTACATTCTAAGCATTG
GAGCACAGACTGACTTCCTTCTGTCTTCTCTGATATACCTTCAAACACAAAATGGTCTA
TGAAGACACACTCACCTATTCCCATTTCTCAGGAGAACTGTCTTCATGTGATGGAAAACCA
GGTCTATGGATTCTGGGGTGCCCAACTCAGACTTTCGGAACAGAGGCATGACCCGCTTACTGA
AGGTTTCTAGTTGTGACAAGAACACTGGTGATTATTACGAGGACAGTTATGAAGATATTTGAGC
ATACTTGTGAGTAAAAACAATGCCATTGAACCTAGGAGCTTCTCTCAGAATCCACCAGTCTTG
AAACGCCATCAACGGGAAATAACTCGTACTACTCTTCAGTCAGATCAAGAGGAAATTGACTATG
ATGATACCATATCAGTTGAAATGAAGAAGGAAGATTTGACATTTATGATGAGGATGAAAATCA
GAGCCCCGAGCTTTCAAAGAAAACAGCAGACTATTTATTGCTGCAGTGGAGAGGCTCTGG
GATTATGGGATGAGTAGCTCCCAACATGTTCTAAGAAAACAGGGCTCAGAGTGGCAGTGTCCCTC
AGTTCAAGAAAGTTGTTTTCCAGGAATTTACTGATGGCTCCTTTACTCAGCCCTTATACCGTGG
AGAACTAAATGAACATTTGGGACTCCTGGGGCCATATATAAGAGCAGAAGTTGAAGATAATATC
ATGGTAACTTTTCAGAAATCAGGCCTCTCGTCCCTATTCTTCTATTCTAGCCTTATTTCTTATG
AGGAAGATCAGAGGCAAGGAGCAGAACCTAGAAAAAACTTTGTCAAGCCTAATGAAACCAAAC
TTACTTTTGGAAAGTGCAACATCATATGGCACCCACTAAAGATGAGTTTGACTGCAAAGCCTGG
GCTTATTTCTCTGATGTTGACCTGGAAAAAGATGTGCACTCAGGCCTGATTGGACCCCTTCTGG
TCTGCCACACTAACACACTGAACCCTGCTCATGGGAGACAAAGTGACAGTACAGGAATTTGCTCT
GTTTTTCACCATCTTTGATGAGACCAAAGCTGGTACTTCACTGAAAATATGGAAAAGAACTGC
AGGGCTCCCTGCAATATCCAGATGGAAGATCCCACTTTTAAAGAGAATTATCGCTTCCATGCAA
TCAATGGCTACATAATGGATACACTACCTGGCTTAGTAATGGCTCAGGATCAAAGGATTGATG
GTATCTGCTCAGCATGGGCAGCAATGAAAACATCCATTCTATTCAATTCAGTGGACATGTGTTT
ACTGTACGAAAAAAGAGGAGTATAAAATGGCACTGTACAACTCTATCCAGGTGTTTTTGAGA
CAGTGGAAATGTTACCATCCAAAGCTGGAATTTGGCGGTGGAATGCCTTATTGGCGAGCATCT
ACATGCTGGGATGAGCACACTTTTTCTGGTGTACAGCAATAAGTGTGAGACTCCCCTGGAATG
GCTTCTGGACACATTAGAGATTTTCAGATTACAGCTTTCAGGACAATATGGACAGTGGGCCCCAA
AGCTGGCCAGACTTCATTATTCCGGATCAATCAATGCCTGGAGCACCAGGAGCCCTTTTCTTG
GATCAAGGTGGATCTGTTGGCACCAATGATTATTACGGCATCAAGACCAGGGTGCCCGTCAG
AAGTTCTCCAGCCTCTACATCTCTCAGTTTATCATCATGTATAGTCTTGATGGGAAGAAGTGGC
AGACTTATCGAGGAAATTCACCTGGAACCTTAATGGTCTTCTTTGGCAATGTGGATTCTATCTGG
GATAAAACACAATATTTTTAACCCTCCAATTATTGCTCGATACATCCGTTTGACCCAACTCAT
TATAGCATTCGCAGCACTCTTCGCATGGAGTTGATGGGCTGTGATTTAAATAGTTGCAGCATGC
CATTGGGAATGGAGAGTAAAGCAATATCAGATGCACAGATTACTGCTTCATCCTACTTTACCAA
TATGTTTGGCACCTGGTCTCCTTCAAAGCTCGACTTCACCTCCAAGGGAGGAGTAATGCCTGG
AGACCTCAGGTGAATAATCCAAAAGAGTGGCTGCAAGTGGACTTCCAGAAGACAATGAAAGTCA
CAGGAGTAACACTCAGGGAGTAAATCTCTGCTTACCAGCATGTATGTGAAGGAGTCTCTCAT
CTCCAGCAGTCAAGATGGCCATCAGTGGACTGCTTTTTTTCAGAATGGCAAAGTAAAGGTTTTT
CAGGGAAATCAAGACTCCTTTCACACCTGTGGTGAACCTCTCTAGACCCACCGTTACTGACTCGCT
ACCTTCGAATTCACCCCAAGAGTTGGGTGCACCAGATTGCCCTGAGGATGGAGGTTCTGGGCTGC
GAGGCACAGGACCTCTACTGA
GGGCGGCGCTGCAGCACCTGCCACTGCCGTCACTCTCCCTCCTCAGCTCCAGGGCAGTGTCC
CTCCCTGGCTTGCTTCTACCTTTGTGCTAAATCCTAGCAGACACTGCCTTGAAGCCTCCTGAA
TTAATATCATCAGTCTGCTTTCTTTGGTGGGGGGCCAGGAGGGTGCATCCAATTTAATTA
ACTCTTACCTATTTTCTGCAGCTGCTCCAGATTACTCCTTCCCTTCCAATATAACTAGGCAAAA
AGAAGTGAGGAGAAACCTGCATGAAAGCATTCTTCCCTGAAAAGTTAGGCCTCTCAGAGTCACC
ACTTCTCTGTTGTAGAAAACTATGTGATGAACTTTGAAAAGATATTTATGATGTTAATCAT
TTCAGGTTAAGCCTCATACGTTTAAATAAACTCTCAGTTGTTTATTATCCTGATCAAGCATG
GAACAAAGCATGTTTTCAGGATCAGATCAATACAATCTTGGAGTCAAAGGCAAATCATTGAGC
AATCTGCAAAATGGAGAGAATAACAATACTACTACAGTAAAGTCTGTTTCTGCTTCTTACACA
TAGATATAATTATGTTATTTAGTCATTATGAGGGGCACATTCTTATCTCCAAAATAGCATTCT
TAACTAGAAATTATAGATGGGGTTCAAGAAATCCCTAAGTCCCTGAAATATATAAGGCATTCT
TGATATAATGCAATGTGCATTTTTCTGACGAGTGTCCATAGATATGGGACATATGACGTGAGC

FIG. 4B



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TCAGATCTTTGTGAAGGAACCTTACTTCTGTGGTGTGACATAATTGGACAAACTACCTACAGAG
ATTTAAAGCTCTAAGGTAAATATAAAATTTTTAAGTGTATAATGTGTTAAACTACTGATTCTAA
TTGTTTGTGTATTTTAGATTCCAACCTATGGAAGTGTGAATGGGAGCAGTGGTGGGAATGCCTT
TAATGAGGAAAACCTGTTTTGCTCAGAAGAAATGCCATCTAGTGATGATGAGGCTACTGCTGAG
TGTGAACATTCTACTCCTCAAAAAAGAAGAGAAAGGTAGAAGACCCCAAGGACTTTCTCTCAG
AATTGCTAAGTTTTTTGAGTCATGCTGTGTTTAGTAATAGAACTCTTGCTTGCTTTGCTATTTA
CACCACAAAGGAAAAAGCTGCACTGCTATACAAGAAAATTATGGAAAAATATTCTGTAACCTTT
ATAAGTAGGCATAACAGTTATAATCATAACATACTGTTTTTTCTTACTCCACACAGGCATAGAG
TGTCTGCTATTAATAACTATGCTCAAAAATTGTGTACCTTTAGCTTTTTAATTTGTAAAGGGGT
TAATAAGGAATATTTGATGTATAGTGCTTGACTAGAGATCATAATCAGCCATACCACATTTGT
AGAGGTTTTACTTGCTTTAAAAAACCTCCACACCTCCCCCTGAACCTGAAACATAAAATGAAT
GCAATTGTTGTTGTTAACTTGTTTATTGACAGCTTATAATGGTTACAAATAAAGCAATAGCATCA
CAAATTTACAAATAAAGCATTTTTTCTACTGCATCTAGTTGTGGTTTGTCCTAACTCATCAA
TGATCTTATCATGCTGATCCTCTACGCCGACGCATCGTGGCCGGCATCACCGGCGCCACA
GGTGCCTTGCTGCGCCTATATCGCCGACATCACCGATGGGGAAGATCGGGCTCGCCACTTCG
GGCTCATGAGCGCTTGTTTCGGCGTGGGTATGGTGGCAGGCCCCGTGGCCGGGGGACTGTTGGGC
GCCATCTCCTTGCTGACCATTCCTTGCGGCGGCGGTGCTCAACGGCCTCAACCTACTACTGG
GCTGCTTCTAATGCAGGAGTGCATAGGGAGAGCGTCGAAATTCTCATGTTTGACAGCTTAT
CATCGGCGCAGCACCATGGCCTGAAATAACCTCTGAAAGAGGAACCTGGTTAGGTACCTTCTGA
GGCGGAAAGAACCAGCTGTGGAATGTGTGTCAGTTAGGGTGTGGAAAGTCCCCAGGCTGGGGAG
CAGGCAGAAGTATGCAAGCATGCATCTCAATTAGTCAGCAACCAGGTGTGGAAAGTCCCCAGG
CTCCCCAGCAGGCAGAAGTATGCAAGCATGCATCTCAATTAGTCAGCAACCATAGTCCCGCCC
CTAACTCCGCCCATCCCGCCCCTAACCTCCGCCCAGTTCCGCCCATTCCTCCGCCCATGGCTGAC
TAATTTTTTTTATTTATGAGAGGCGGAGGCCCTCGGCCTCTGAGCTATTCCAGCCGTAGTG
AGGAGGCTTTTTTGGAGGCCTAGGCTTTTGCAAAAAGCTTCACGCTGCCGCAAGCACTCAGGGC
GCAAGGGCTGCTAAAGGAAGCGGAACACGTAGAAAGCCAGTCCGCAGAAACGGTGTGCTGACCCCG
GATGAATGTGAGTACTGGGCTATCTGGACAAGGGAAGCAAGCGCAAGAGAGAAAGCAGGTA
GCTTGCAAGTGGGCTTACATGGCGATAGCTAGACTGGGCGGTTTTATGGACAGCAAGCGAACCGG
AATTCGCCAGTGGGGCGCCCTCTGGTAAGGTTGGGAAGCCCTGCAAGTAACTGGATGGCTTT
CTTGCCCGCAAGGATCTGATGCGCAGGGGATCAAGATCTGATCAAGAGACAGGATGAGGATCG
TTTCGCTATGATTGAACAAGATGGATTGCACGCAGGTTCTCCGGCCGCTTGGGTGGAGAGGCTAT
TCGGCTATGACTGGGCACAACAGACAATCGGCTGCTCTGATGCCGCCGTGTTCCGGCTGTGAGC
GCAGGGGCGCCCGGTTCTTTTTGTCAAGACCGACCTGTCCGGTGCCCTGAATGAACTGCAGGAC
GAGGCAGCGCGGCTATCGTGGCTGGCCACGACGGGCGTTCTTGCGCAGCTGTGCTCGACGTTG
TCACTGAAGCGGGAAGGGACTGGCTGCTATTGGGCGAAGTGCCGGGGCAGGATCTCCTGTATC
TCACCTTGCTCCTGCCGAGAAAGTATCCATCATGGCTGATGCAATGCGGCGGCTGCATACGCTT
GATCCGGCTACCTGCCCATTCGACCACCAAGCGAAACATCGCATCGAGCGAGCACGTACTCGGA
TGGAAGCCGGTCTTGTCGATCAGGATGATCTGGACGAAGAGCATCAGGGGCTCGCGCCAGCCGA
ACTGTTCCGCCAGGCTCAAGGCGCGCATGCCCGACGGCGAGGATCTCGTCTGACCCATGGCGAT
GCCTGCTTGCCGAATATCATGGTGGAAAATGGCCGCTTTTCTGGATTCTCATGACTGTGGCCGGC
TGGGTGTGGCGGACCGCTATCAGGACATAGCGTTGGCTACCCGTGATATTGCTGAAGAGCTTGG
CGGCGAATGGGCTGACCGCTTCTCGTGCTTTACGGTATCGCCGCTCCCGATTCCGACGCGCATC
GCCTTCTATCGCCTTCTTGACGAGTTCTTCTGAGCGGGACTCTGGGGTTTCAAAATGACCGACCA
AGCGACGCCCAACCTGCCATCACGAGATTTGATTCCACCGCCGCTTCTATGAAAGGTTGGGC
TTCCGGAATCGTTTTCCGGGACGCCGGCTGGATGATCCTCCAGCGCGGGGATCTCATGCTGGAGT
TCTTCGCCCACCCCGGCTCGATCCCCCTCGCGAGTTGGTTTCAGCTGCTGCTGAGGCTGGACGA
CCTCGCGGAGTTCTACCGGCAGTGCAAAATCCGTCCGCATCCAGGAAACCAGCAGCGGCTATCCG
CGCATCCATGCCCCGAACTGCAGGAGTGGGGAGGCACGATGGCCGCTTTGGTCCCGGATCTTT
GTGAAGGAACCTTACTTCTGTGGTGTGACATAATTGGAGAACTACCTACAGAGATTTAAAGCT
CTAAGGTAAATATAAAATTTTTAAGTGTATAATGTGTTAACTACTGATTCTAATTGTTTGTGT
ATTTTAGATTCCAACCTATGGAAGTGTGAATGGGAGCAGTGGTGGAAATGCCTTTAAATGAGGAA
AACCTGTTTTGCTCAGAAGAAATGCCATCTAGTGATGATGAGGCTACTGCTGACTCTCAACATT
CTACTCCTCAAAAAAGAAGAGAAAGGTAGAAGACCCCAAGGACTTTCTTTCAGAATTGCTAAG
TTTTTTGAGTCATGCTGTGTTTAGTAATAGAACTCTTGCTTGCTTTGCTATTTACACCACAAAG
GAAAAAGCTGCACTGCTATACAAGAAAATTATGGAAAAATATTCTGTAACCTTTATAAGTAGGC
ATAACAGTTATAATCATAACATACTGTTTTTTCTTACTCCACACAGGCATAGAGTGTCTGCTAT
TAATAACTATGCTCAAAAATTGTGTACCTTTAGCTTTTTAATTTGTAAAGGGGTTAATAAGGAA

FIG. 4C



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TATTTGATGTATAGTGCCTTGACTAGAGATCATAATCAGCCATACCACATTTGTAGAGGTTTAA
CTTGCTTTAAAAAACCTCCCACACCTCCCCCTGAACCTGAAACATAAAATGAATGCAATTGTTG
TTGTTAACTTGTTTATTGACGCTTATAATGGTTACAAATAAAGCAATAGCATCACAAATTTTCA
AAATAAAGCATTTTTTTTCACTGCATTCTAGTTGTGGTTTGTCCAAACTCATCAATGGTATCTTA
TCATGTCTGGATCTCGACCGAGCCCTTGAGAGCCTTCAACCCAGTCAGCTCCTTCCGGTGGGCG
CGGGGCATGACTATCGTCGCCGCACTTATGACTGTCTTCTTTATCATGCAACTCGTAGGACAGG
TGCCGGCAGCGCTCTGGGTCAATTTTCGGCGAGGACCGCTTTCGCTGGAGCGCGACGATGATCGG
CCTGTGCTTGCGGTATTTCGGAATCTTGCACGCCCTCGCTCAAGCCTTCGTCACTGGTCCCGCC
ACCAAACGTTTCGGCGAGAAGCAGGCCATTATCGCCGGCATGGCGGCCGACGCGCTGGGCTACG
TCTTGCTGGCGTTTCGCGACGCGAGGCTGGATGGCCTTCCCCATTATGATTCTTCTCGCTTCCGG
CGGCATCGGGATGCCCGCGTTGCAGGCCATGCTGTCCAGGCAGGTAGATGACGACCATCAGGGA
CAGCTTCAAGGATCGCTCGCGGCTCTTACCAGCCTAACTTCGATCACTGGACCGCTGATCGTCA
CGGCGATTTATGCCCGCTCGGCGAGCACATGGAACGGGTGGCATGGATTGTAGGCGCCGCCCT
ATACCTTGTCTGCCTCCCCGCGTTGCGTCGCGGTGCATGGAGCCGGGCCACCTCGACCTGAATG
GAAGCCGGCGGCACCTCGCTAACGGATTACCACTCCAAGAATTGGAGCCAATCAATTCTTGCG
GAGAACTGTGAATGCGCAAACCAACCTTGGCAGAACATATCCATCGCGTCCGCCATCTCCAGC
AGCCGCACGCGCGCATCTCGGGCCGCGTTGCTGGCGTTTTTCCATAGGCTCCGCCCCCTGAC
GAGCATCACAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATACC
AGGCGTTTCCCCCTGGAAGCTCCCTCGTGCCTCTCCTGTTCCGACCTGCGGCTTACCGGATA
CCTGTCCGCTTTCTCCCTTCGGGAAGCGTGGCGCTTCTCAATGCTCACGCTGTACCTATCTC
AGTTCCGGTGTACCTCGTTCGCTCCAAGCTGGGCTGTGTGCACGAACCCCCGTTACGCCCCGACC
GCTGCGCTTATCCGGTAACATATCGTCTTGAGTCCAACCCGGTAAGACACGACTTATCGCCACT
GGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTTCTTG
AAGTGGTGGCCTAACTACGGCTACACTAGAAGGACAGTATTTGGTATCTGCGCTCTGCTGAAGC
CAGTTACCTTCGGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAACAAACCACCGCTGGTAGCGG
TGGTTTTTTTGTGTTGCAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTG
ATCTTTTCTACGGGTCTGACGCTCAGTGAACGAAACTCACGTTAAGGGATTTTGGTCATGA
GATTATCAAAAAGGATCTTCACCTAGATCCTTTTAAATTAAAAATGAAGTTTTAAATCAATCTA
AAGTATATATGAGTAACTTGGTCTGACAGTTACCAATGCTTAATCAGTGAGGCACCTATCTCA
GCGATCTGTCTATTTTCGTTTCATCCATAGTTGCCTGACTCCCCGTGCTGTAGATAACTACGATAC
GGGAGGGCTTACCATCTGGCCCCAGTGCTGCAATGATACCGCGAGACCCACGCTCACC GGCTCC
AGATTTATCAGCAATAAACCAGCCAGCCAGAAGGGCCGAGCGCAGAAGTGGTCCTGCAACTTTA
TCCGCCTCCATCCAGTCTATTAATTGTTGCCGGAAGCTAGAGTAAGTAGTTCCGCAGTTAATA
GTTTGCGCAACGTTGTTGCCATTGCTGCAGGCATCGTGGTGTACGCTCGTCTGTTGGTATGGC
TTCATTACGCTCCGGTTCCCAACGATCAAGGCGAGTTACATGATCCCCATGTTGTGCAAAAAA
GCGGTTAGCTCCTTCGGTCTCCGATCGTTGTGAGAAGTAAGTTGGCCGAGTGTATCACTCA
TGGTTATGGCAGCACTGCATAATTCTCTTACTGTGTCATGCCATCCGTAAGATGCTTTTCTGTGAC
TGGTGAGTACTCAACCAAGTCATTCTGAGAATAGTGTATGCGGCGACCGAGTTGCTCTTGCCCG
GCGTCAACACGGGATAATACCGCGCCACATAGCAGAACTTTAAAAGTGCTCATCATTTGGAAAAC
GTTCTTCGGGGCGAAAACTCTCAAGGATCTTACCGCTGTTGAGATCCAGTTTCGATGTAACCCAC
TCGTGCACCCAACTGATCTTCAGCATCTTTTACTTTTACCAGCGTTTCTGGGTGAGCAAAAACA
GGAAGGCAAAATGCCGCAAAAAAGGGAATAAGGGCGACACGGAAATGTTGAATACTCATACTCT
TCCTTTTTCAATATTATTGAAGCATTTATCAGGGTTATTGTCTCATGAGCGGATACATATTTGA
ATGTATTTAGAAAAATAAACAAATAGGGGTTCCGCGCACATTTCCCCGAAAAGTGCCACCTGAC
GTCTAAGAAACCATTATTATCATGACATTAACCTATAAAAAATAGGCGTATCACGAGGCCCTTTC
GTCTTCAA

FIG. 4D

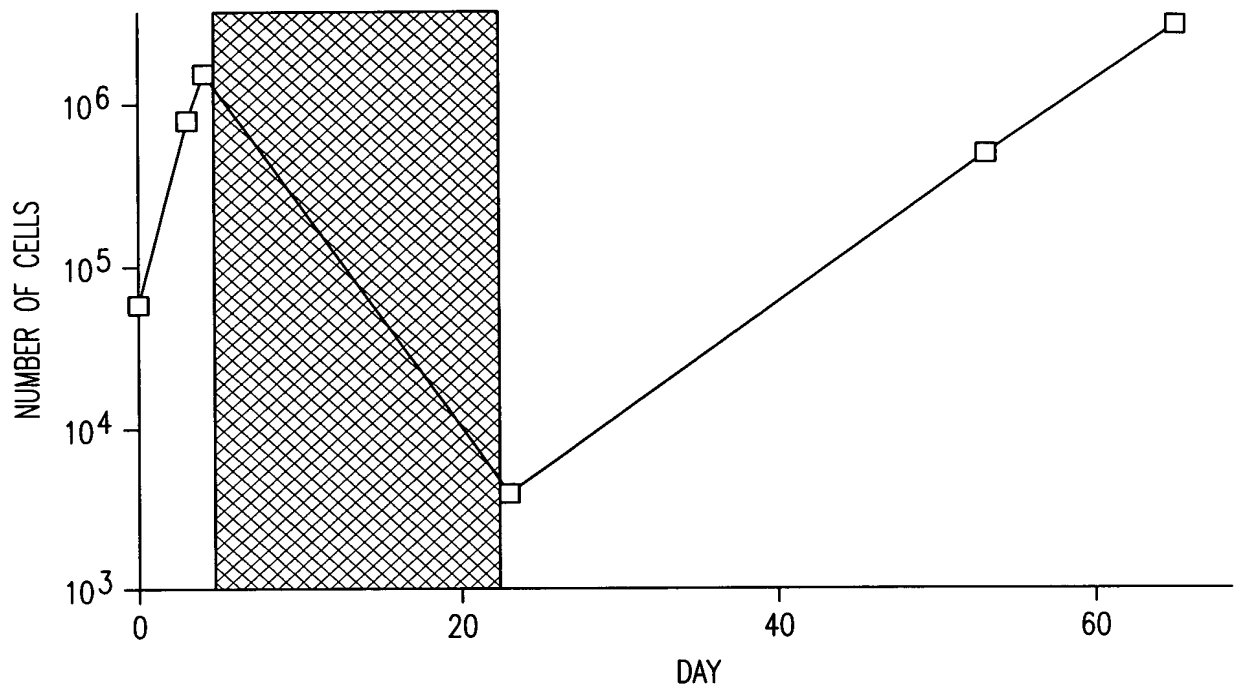
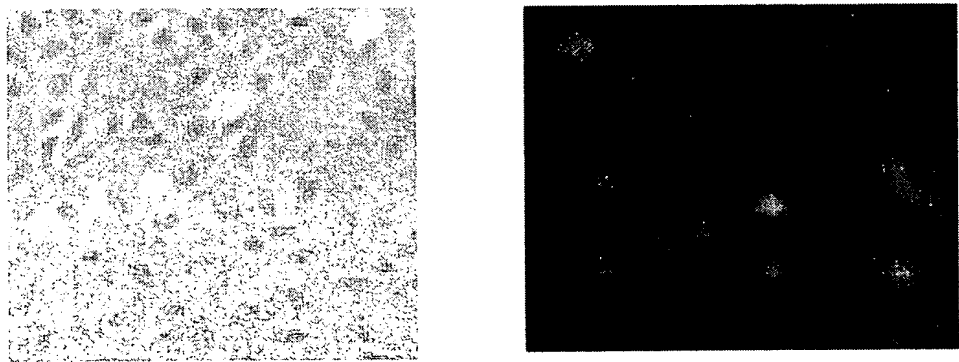


FIG. 5A



MORPHOLOGY & FLUORESCENCE OF PLE9 TRANSDUED CELLS AT DAY 53

FIG. 5B

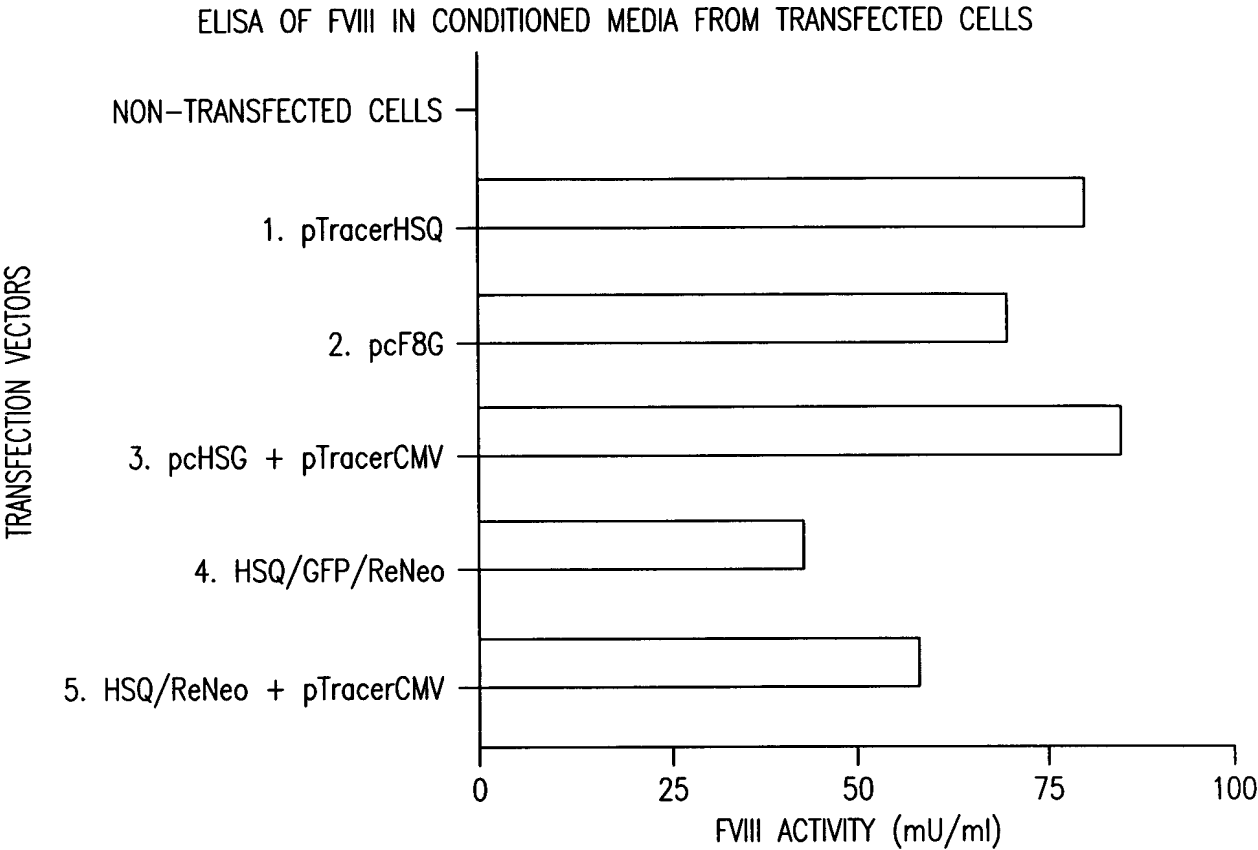


FIG. 6



TITLE: TRANSGENIC CIRCULATING ENDOTHELIAL CELLS
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SERIAL NO.: 09/865,022

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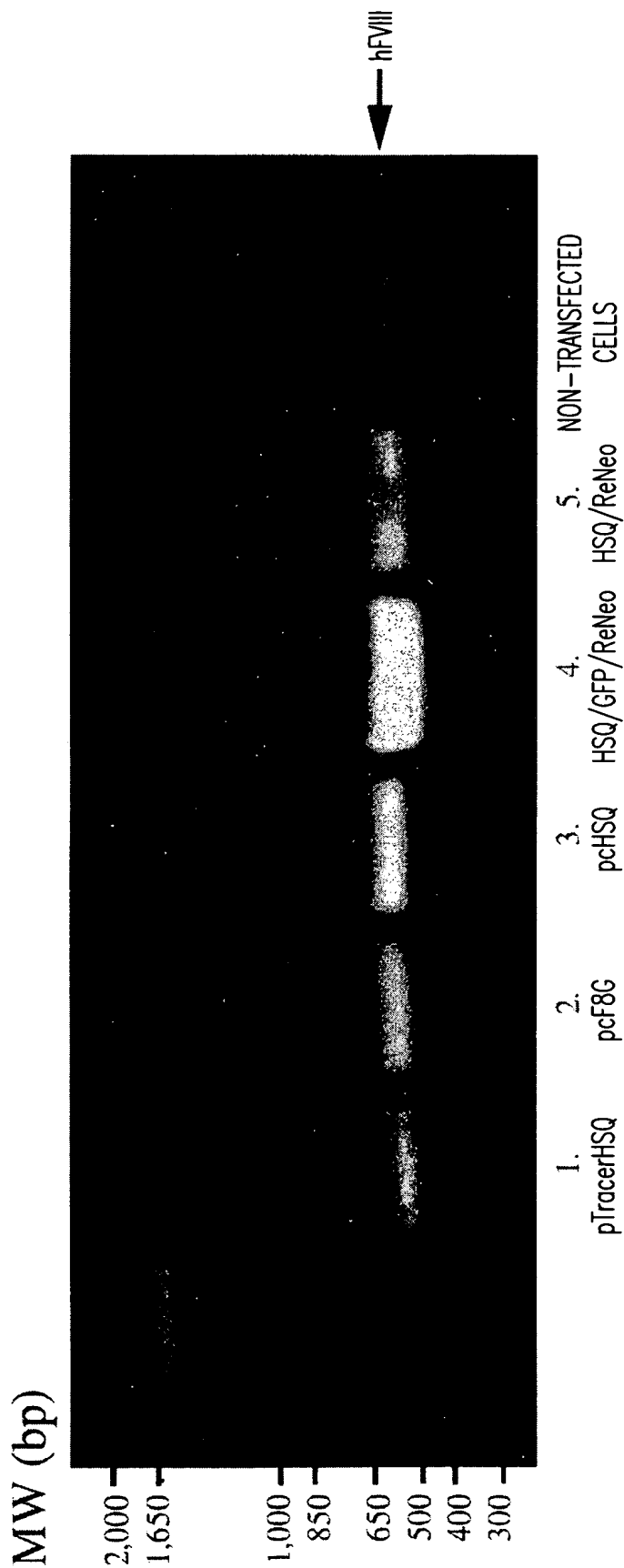


FIG. 7